



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/797,564

03/11/2004

Osamu Ishibashi

Q80348

4819

23373

7590

06/20/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

COHEN, AMY R

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,564

Applicant(s)

ISHIBASHI ET AL.

Examiner

Amy R. Cohen

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-15 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-15 and 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5-15, 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harumoto (US PG PUB 2002/0021909).

Regarding claims 1, 3, 5-13: Harumoto discloses an image formation device (1) that uses recording agents of multiple colors to form a color image on a medium like paper (Paragraph [0042]), said image formation device comprising: an image formation module (30) that holds multiple recording agent cartridges (5Y, 5M, 5C, 5K) respectively filled with the recording agents of the multiple colors in an attachable and detachable manner and integrally moves said multiple recording agent cartridges in a circumferential direction to sequentially form corresponding color component images eventually to form a color image with supplies of the recording agents from said multiple recording agent cartridges (Paragraph [0042]); an information transmission module (92) that is arranged at a specific location facing a preset circumferential position where each of the multiple recording agent reaches in formation of a corresponding color component image at an image-forming circumferential position, said information transmission module transmitting information in a contactless, storable manner to a storage element mounted on a certain recording agent cartridge, which has completed corresponding color component image at the image-forming circumferential position and has

Art Unit: 2859

moved in the circumferential direction to a posterior circumferential position (Fig. 2, Paragraphs [0064]-[0070]); and a control module (115) that controls said information transmission module to store image formation-relating information, which regards information of the color image by said image formation module, into each of said storage elements mounted on said multiple recording agent cartridges (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device wherein said control module controls said information transmission module to store previous image formation-relating information, which regards formation of a previous color image, in the course of formation of the corresponding color component images by said image formation module (Fig. 2, Paragraphs [0064]-[0070], [0077]).

Harumoto discloses the image formation device wherein the image formation-relating information includes at least either a number of formed images with regard to each of the multiple colors and a consumption of the recording agent with regard to each of the multiple colors (Paragraph [0018]).

Harumoto discloses the image formation device wherein said multiple recording agent cartridges are filled with recording agents of four colors, that is, cyan, magenta, yellow, and black (paragraph 0042)).

Harumoto discloses the image formation device wherein said image formation module holds said multiple recording agent cartridges on a rotatable, quasi-cylindrical rotary holder unit to form the respective color component images (Figs. 1-5, 8, Paragraphs [0042], [0048]).

Harumoto discloses the image formation wherein each of said multiple recording agent cartridges is designed to have a substantially fan-shaped cross section and form a substantially

Art Unit: 2859

circular cross section as a whole in the case of attachment of said multiple recording agent cartridges to the rotary holder unit (Fig. 3, Paragraphs [0042], [0048]).

Harumoto discloses the image formation device wherein said information transmission module is located in a neighborhood of an end of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device wherein said information transmission module is located to successively face said storage elements mounted on said multiple recording agent cartridges with rotation of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device wherein the recording agent is either toner or ink (Paragraph [0042]).

Harumoto discloses the image formation device wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); and an information control unit that, when the analyzed information includes storage instruction information for storage of the image formation-relating information, controls said memory unit to store the image formation-relating information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit, and said information transmission module transmits the information carried on the electromagnetic wave in the predetermined frequency band (Paragraphs [0066]-[0077]).

Harumoto discloses the image formation device wherein said storage element further comprises a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0066]-[0077]).

Regarding to claim 1: Harumoto discloses information transmission module arranged at a specific location facing a preset anterior circumferential position. Changing the location of the information transmission module from the location shown by Harumoto to a location facing a preset posterior circumferential position where each of the multiple recording agent cartridges reaches after formation of a corresponding color component image, absent any criticality, is only considered to be an obvious modification of Harumoto device that a person having ordinary skill in the art at the time the invention was made would be able to provide using routine experimentation since the courts have held that there is no invention in shifting the position if the operation of the device would not be thereby modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the position of the information transmission module from an anterior circumferential position to a posterior circumferential position since, the information transmission module will perform the same function in both locations.

Regarding claims 14, 15, 19-27: Harumoto discloses an image formation device (1) that uses a recording agent to form an image on a medium like paper (Paragraph [0042]), said image formation device comprising: an image formation module (30) that holds multiple recording agent cartridges (5Y, 5M, 5C, 5K) respectively filled with the recording agent in an attachable

Art Unit: 2859

and detachable manner and integrally moves said multiple recording agent cartridges in a circumferential direction to sequentially form corresponding color component images and to eventually form a color image with a supply of the recording agent from at least one recording agent cartridge among said multiple recording agent cartridges (Paragraph [0042]); an information transmission module (92) that is arranged at a specific location facing a preset circumferential position where each of the multiple recording agent cartridges reaches in formation of a corresponding color component image at an image-forming circumferential position, said information transmission module transmitting information in a contactless, storable manner to a storage element mounted on a certain recording agent cartridge, which has completed corresponding color component image at the image-forming circumferential position and has moved in the circumferential direction to a posterior circumferential position (Fig. 2, Paragraphs [0064]-[0070]), wherein, while a certain one of said multiple recording agent cartridges is in an executable position of formation of a corresponding color component image by said image formation module, said information transmission module transmits information in a contactless, storable manner to a storage element mounted on another recording agent cartridge different from the certain recording agent cartridge (Fig. 2, Paragraphs [0064]-[0070]); and a control module (115) that controls said information transmission module to store image formation-relating information, which regards information of the image by said image formation module, into each of said storage elements mounted on said multiple recording agent cartridges (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device comprising a cartridge specification module (95) that specifies one recording agent cartridge among said multiple recording agent

cartridges, wherein said image formation module forms the image with a supply of the recording agent cartridge specified by said cartridge specification module (Paragraph [0081]-[0088]).

Harumoto discloses the image formation device wherein said control module controls said information transmission module to store the image formation-relating information into said storage element (91, 101) mounted on a specified recording agent cartridge, in response to a detachment instruction of said specified recording agent cartridge (Paragraphs [0018]-[0020]).

Harumoto discloses the image formation device wherein the image formation-relating information includes at least either a number of formed images and a consumption of the recording agent (Paragraph [0018]).

Harumoto discloses the image formation device wherein said image formation module holds said multiple recording agent cartridges on a rotatable, quasi-cylindrical rotary holder unit to form the respective color component images (Figs. 1-5, 8, Paragraphs [0042], [0048]).

Harumoto discloses the image formation wherein each of said multiple recording agent cartridges is designed to have a substantially fan-shaped cross section and form a substantially circular cross section as a whole in the case of attachment of said multiple recording agent cartridges to the rotary holder unit (Fig. 3, Paragraphs [0042], [0048]).

Harumoto discloses the image formation device wherein said information transmission module is located in a neighborhood of an end of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device wherein said information transmission module is located to successively face said storage elements mounted on said multiple recording agent cartridges with rotation of the rotary holder unit (Fig. 2, Paragraphs [0064]-[0070]).

Harumoto discloses the image formation device wherein the recording agent is either toner or ink (Paragraph [0042]).

Harumoto discloses the image formation device wherein said storage element comprises: a memory unit that stores information (Paragraphs [0066]-[0077]); a receiver unit that receives electromagnetic wave in a predetermined frequency band (Paragraphs [0066]-[0077]); an information analyzer unit that analyzes information carried on the electromagnetic wave in the predetermined frequency band received by said receiver unit (Paragraphs [0066]-[0077]); and an information control unit that, when the analyzed information includes storage instruction information for storage of the image formation-relating information, controls said memory unit to store the image formation-relating information, which is sent on the electromagnetic wave in the predetermined frequency band and is analyzed by said information analyzer unit, and said information transmission module transmits the information carried on the electromagnetic wave in the predetermined frequency band (Paragraphs [0066]-[0077]).

Harumoto discloses the image formation device wherein said storage element further comprises a power supply unit (111) that utilizes energy of the electromagnetic wave in the predetermined frequency band received by said receiver unit to generate electric power required for the analysis of information by said information analyzer unit and for the storage of information by said information control unit (Paragraphs [0066]-[0077]).

Regarding to claim 14: Harumoto discloses information transmission module arranged at a specific location facing a preset anterior circumferential position. Changing the location of the information transmission module from the location shown by Harumoto to a location facing a preset posterior circumferential position where each of the multiple recording agent cartridges

Art Unit: 2859

reaches after formation of a corresponding color component image, absent any criticality, is only considered to be an obvious modification of Harumoto device that a person having ordinary skill in the art at the time the invention was made would be able to provide using routine experimentation since the courts have held that there is no invention in shifting the position if the operation of the device would not be thereby modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the position of the information transmission module from an anterior circumferential position to a posterior circumferential position since, the information transmission module will perform the same function in both locations.

Response to Arguments

3. Applicant's arguments filed March 27, 2006 have been fully considered but they are not persuasive.

Regarding Applicant's arguments related to the location of the information transmission module, while Harumoto discloses the information transmission module located at a preset anterior circumferential position, it would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the location of the information transmission module to a posterior circumferential position since the courts have held that there is no invention in shifting the position if the operation of the device would not be thereby modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to shift the position of the information transmission module

from an anterior circumferential position to a posterior circumferential position since, the information transmission module will perform the same function in both locations.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R. Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARC
June 12, 2006



Diego Gutierrez
Supervisory Examiner
Tech Center 2800